

Work Order ID 111857

January-23-14 2:41:47 PM

111857

Page 1

E 4702-041
B 111857

Item ID: E4702-041

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Ladder Assembly

Start Date: 24/01/2014 Start Qty: 5.00 ***5***

Cust Item ID:

Required Date: 28/02/2014 Req'd Qty: 5.00 ***5***

Customer:

Reference:

Approvals: Process Plan: HP Date: 14-01-23 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
E4702	<u>Rev A. Jm</u>

100		0.00							
100									
Purchasing	Memo	0.00							

Purchasing
Issue P/O: 82776
Supplier: WEJAY.
Machine as per Dwg E4702-1
Conformity sheet required

CL 14/01/28 S

110	Receive & Inspect for Damage & Mat'l Certs	0.00							
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110									
Packaging	Memo	0.00							
Packaging									

5x SP 14-3-27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Work Order ID 111857

January-23-14 2:41:47 PM

111857

Page 2

Item ID: E4702-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Ladder Assembly
Start Date: 24/01/2014 Start Qty: 5.00 ***5*** Cust Item ID:
Required Date: 28/02/2014 Req'd Qty: 5.00 ***5*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC6- Inspect dimensions to drawing Memo	0.00 0.00				S			P10 →
130 *130* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				5	461443		
140 *140* QC Quality Control	QC7-Inspect Chemical Conversion Coat Memo	0.00 0.00				5	0	0	14-4-7

- LFI per drag / PRESURE WASA P/O: 23701 C214/04/08
- QC6 CEN 10/4/14 (5)

DQA: Aut Date: 14/01/25QA Closed: 20 Date: 14/4/14

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

Work Order: <u>111857</u>	DISPOSITION Rework <input checked="" type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS			
Part No. <u>E4702-047</u>		Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
NCR No. <u>14-3741</u>		Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input checked="" type="checkbox"/>	Quality <input type="checkbox"/>
		Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design				Machining marks found		Build out marks	DAS 36 9-89	DAS 27 9-89	
Doc/Data				@ inspection in on Part.		As per attached email			
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input checked="" type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Page 3

Accept

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

5

5

Customer:

Reference:

Run Start *NR1*

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Operation	Description
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100	...

Set Up/ Run Hours

Tool ID	Tool #	Plan Code
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Accept Qty	Reject Qty	Reject Number	Insp. Stamp

141

0.00

141

0.00

SprayPaint

Spray Painting

Memo

PRIME AS PER DWG

~~***MASK THREADED HOLES AND REAMED HOLES FOR NOTE~~

10*****

128049

0.00 **DAS**

DAS

142

142

0.00

QC

Quality Control

Memo

0.00

143

143

0.00

Small Fab

Small Fab

Memo

ASSEMBLE AS PER NOTE #8/9/10(DO NOT REAM HOLES/REAMING
PERFORMED ON PRIOR STEP BY MACHINING

DQA:

AutDate: 14/04/25

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: OKDate: 14/4/14Work Order update only ☐

Work Order: <u>111857</u>	DISPOSITION Rework <input checked="" type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS			
Part No. <u>E4702-041</u>		Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
NCR No. <u>14-3740</u>		Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>
		Thermoforming <input type="checkbox"/>	Finishing <input checked="" type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	<u>14-04-09</u>	<u>141</u>	<u>x5</u>	current masking method of using earplugs to mask holes caused shadows in primer R.C. old method (earplugs) not good enough for masking	 DAS 29 9-89	Do not scuff, re-prime use slitted drinking straws to mask holes to prevent shadowing	 29 9-89 <u>14/04/09</u>	<u>SMB</u>	<u>SMB</u>
Doc/Data									
Equip/Tooling <input checked="" type="checkbox"/>									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General		
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Dimensions
<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Over/Under tolerance
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Part Incorrect
<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved
<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Positioned Wrong
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Power Loss/Surge
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread	<input type="checkbox"/> Pressure/Forced
<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set	<input type="checkbox"/> Set-up
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Weld
			<input type="checkbox"/> Wrong Stock Pulled
			<input type="checkbox"/> Other

Work Order ID 111857

111857

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Item ID: E4702-041 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Ladder Assembly
 Start Date: 24/01/2014 Start Qty: 5.00 *5* Cust Item ID:
 Required Date: 28/02/2014 Req'd Qty: 5.00 *5* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
144	QC5- Inspect part completeness to step on W/O	0.00				S			
144		0.00							
QC	Memo								
Quality Control									
150	Identify as per dwg & Stock Location: _____	0.00				5x			
150		0.00							
Packaging	Memo								
Packaging									
160	QC21- Final Inspection - Work Order Release	0.00							
160		0.00							
QC	Memo								
Quality Control									

DAS
28
9-89

APR 10 2014

MLJ 14-04-11

14 04-10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____
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Picklist Print

January-23-14 2:41:53 PM

Page 1

Work Order ID: 111857

111857

Parent Item: E4702-041

F4702-041

Parent Item Name: Ladder Assembly

Start Date: 24/01/2014

Required Date: 28/02/2014

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A NEW ISSUE 14-01-22 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
E4702-1P *F4702-1P* Ladder		Purchased	No				Each	0.0000		5		14/04/10	DAS 36 9-89
E4715-1 *F4715-1* Stud		Manufactured	No				Each	0.0000		30		14/04/10	DAS 36 9-89
E4715-3 *F4715-3* Stud		Manufactured	No				Each	0.0000		10		14/04/10	DAS 36 9-89
MS21042L4 *MS21042L 4* Locknut		Purchased	No				Each	4,276.000		30		14/04/10	DAS 36 9-89

Location

Loc Qty

Loc Code

GA	68
m126333	68
ST509	4000
m127255	2000
m127813	2000
ST518	208
m127376	208

M128500
300

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____
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Picklist Print

January-23-14 2:41:53 PM

Page 2

Work Order ID: 111857

111857

Parent Item: E4702-041

F4702-041

Parent Item Name: Ladder Assembly

Start Date: 24/01/2014

Required Date: 28/02/2014

Start Qty: 5.00

Required Qty: 5.00

MS21042L5 Purchased No
MS21042L5
Nut

Each 1,092.000 10

**

14/04/10
DAS
36
9-89

Location	Loc Qty	Loc Code
GA	5	
117611	5	
ST314	87	
125535	87	
ST509	1000	
m127304	500	
m127813	500	

NAS1149D0463J Purchased No
NAS1149D0463J
WASHER

Each 6,785.000 30

**

14/04/10
DAS
36
9-89

Location	Loc Qty	Loc Code
ST294	2385	
M127693	2385	
ST510a	4400	
M127813	1400	
M127904	3000	

NAS1149D0563J Purchased No
NAS1149D0563J
Washer

Each 585.0000 15

**

14/04/10
DAS
36
9-89

Location	Loc Qty	Loc Code
GA	273	
m125807	273	
ST510a	312	
m126319	312	

NAS76A4-020P Purchased No
NAS76A4-020P
Bushing

Each 0.0000 15

**

M128398 (10x) M128749 (5x)
14/04/10
DAS
36
9-89

January-23-14 2:41:53 PM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube <input type="checkbox"/></td> <td style="width:15%;">Crosstube <input type="checkbox"/></td> <td style="width:15%;">Water Jet <input type="checkbox"/></td> <td style="width:15%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design <input type="checkbox"/>									
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Handling/Pre <input type="checkbox"/>									
Material <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Offset/Setup <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Transport <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____
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Picklist Print

January-23-14 2:41:53 PM

Page 3

Work Order ID: 111857

111857

Parent Item: E4702-041

F4702-041

Parent Item Name: Ladder Assembly

Start Date: 24/01/2014

Required Date: 28/02/2014

Start Qty: 5.00

Required Qty: 5.00

NAS76A4-025P

Purchased

No

Each

0.0000

5

NAS76A4-025P

Bushing

M128454
(5P)

**

14/04/10

DAS

36

9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

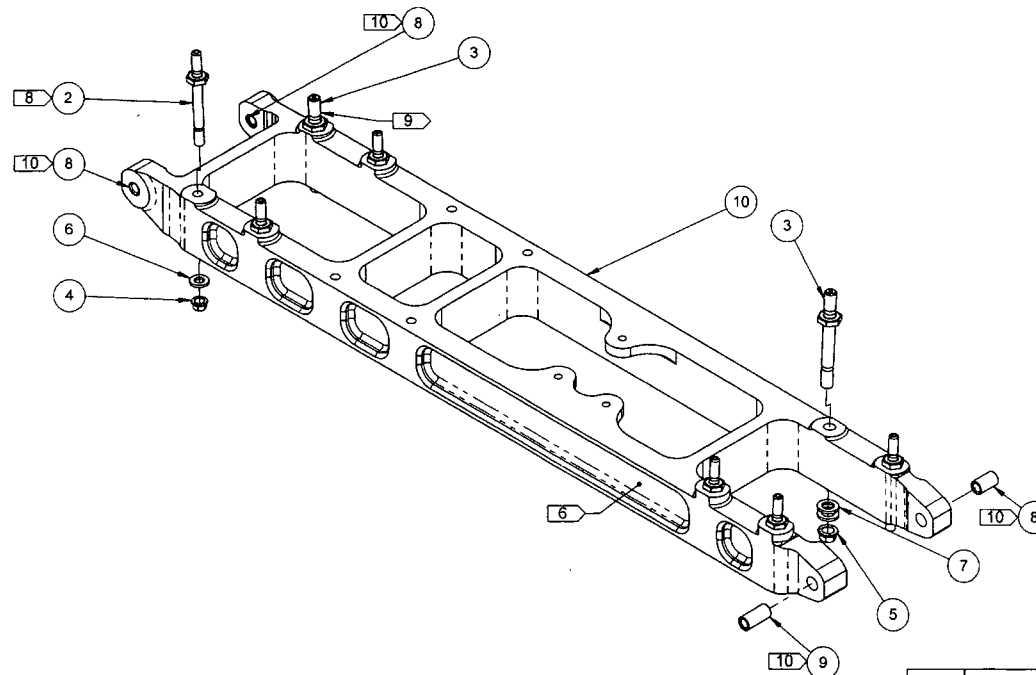
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
--	--	---	--

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	E4702-041	LADDER ASSEMBLY
2	6	E4715-1	STUD
3	2	E4715-3	STUD
4	6	MS21042L4	NUT
5	2	MS21042L5	NUT
6	6	NAS1149D0463J	WASHER
7	3	NAS1149D0563J	WASHER
8	3	NAS76A4-020P	BUSHING
9	1	NAS76A4-025P	BUSHING
10	1	E4702-1	LADDER



111857MP
14-01-23

RELEASED
2013-11-23

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 6.15 lbs
- 8) TORQUE 1/4" FASTENERS TO 50-70 IN-LB (6 PL)
- 9) TORQUE 5/16" FASTENERS TO 100-140 IN-LB (2 PL)
- 10) REAM BUSHING HOLES USING $\varnothing 0.3745$ REAMER. INSTALL BUSHINGS WITH WET PRIMER.

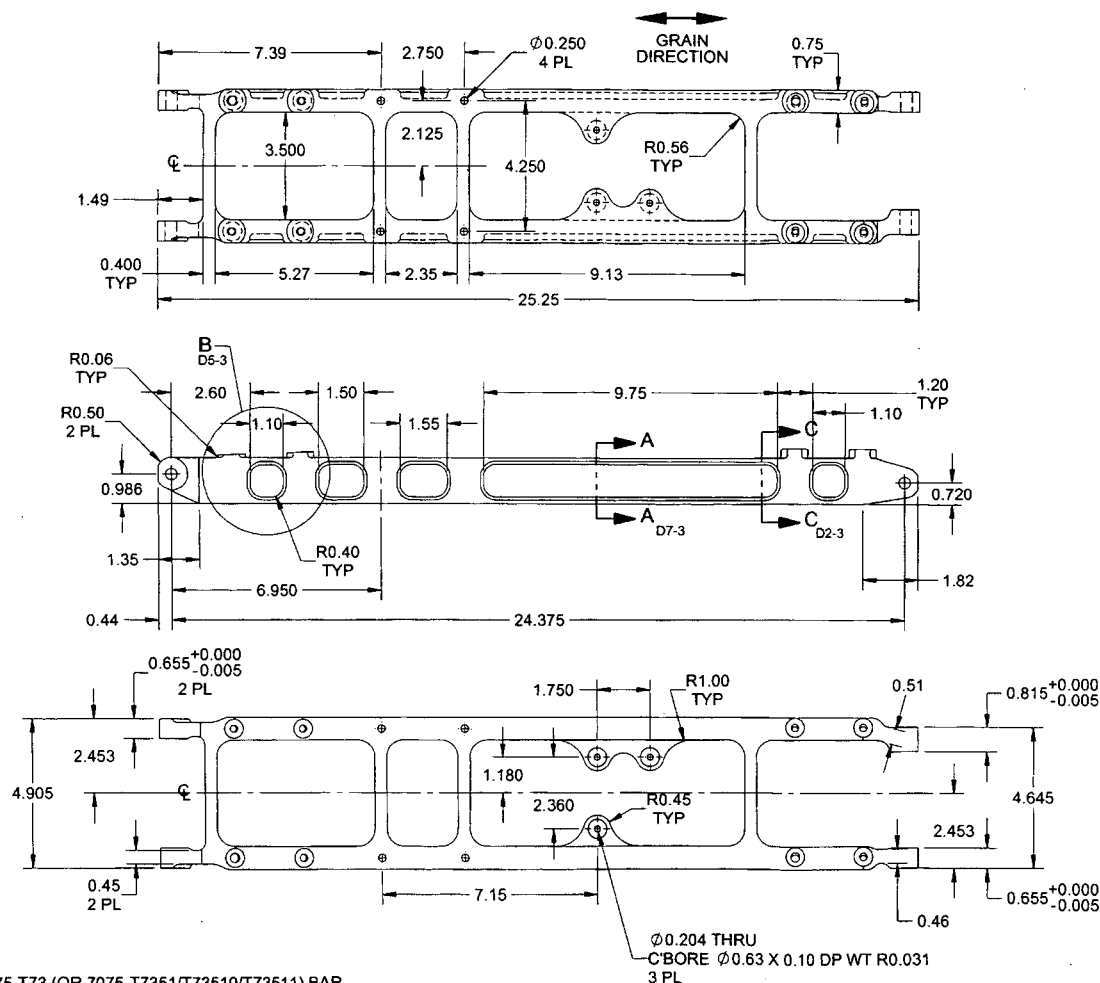
E4702-041 LADDER ASSEMBLY

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	RF	12.08.27
DESIGN	RF		
DRAWN	RF		
CHECKED	RF		
MFG. APPR.	RF		
APPROVED	RF		
DE APPR.	RF		
DATE	12.08.27		

EAGLE COPTERS LTD.
CALGARY, ALBERTA, CANADA

DRAWING NO. E4702
TITLE LADDER
REV. A
SHEET 1 OF 3
SCALE NTS

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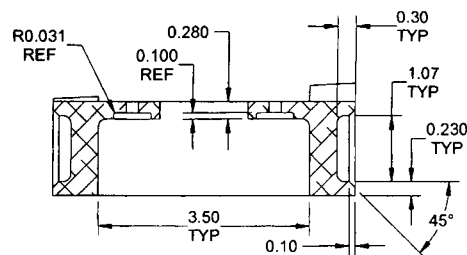
NOTES:

- 1) MATERIAL: 7075-T73 (OR 7075-T7351/T73510/T73511) BAR
PER AMS-QQ-A-200/11 OR AMS-QQ-A-225/9 (AMS 4124)
OR AMS-QQ-A-250/12 (AMS 4078)
REF DART SPEC M7075T73B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME YELLOW PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 5.64 lbs
- 8) SURFACE FINISH TO BE NO GREATER THAN 80 MICROINCH
- 9) UNDEFINED FEATURES ARE CONTROLLED BY SOLIDWORKS MODEL E4702
- 10) LPI PER ASTM 1417 LEVEL 2

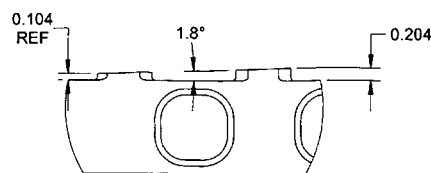
E4702-1 LADDER

CRITICAL PART
MRB DECISIONS ON THIS PART MAY ONLY BE PERFORMED BY DART DE#02. ANY CHANGES TO THE DESIGN, MANUFACTURING PROCESS, APPROVED OPERATING ENVIRONMENT, AND DESIGN LOADING SPECTRUM WILL REQUIRE A REVIEW OF THE FATIGUE EVALUATION FOR THIS PART.

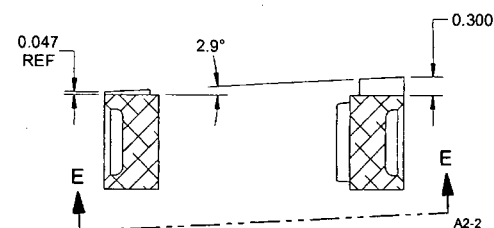
DESIGN	RF	EAGLE COPTERS LTD. CALGARY, ALBERTA, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. A
MFG. APPR.	RF	E4702	SHEET 2 OF 3
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	LADDER	NTS
DATE	12.08.27	COPYRIGHT © 2012 BY EAGLE COPTERS LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.	



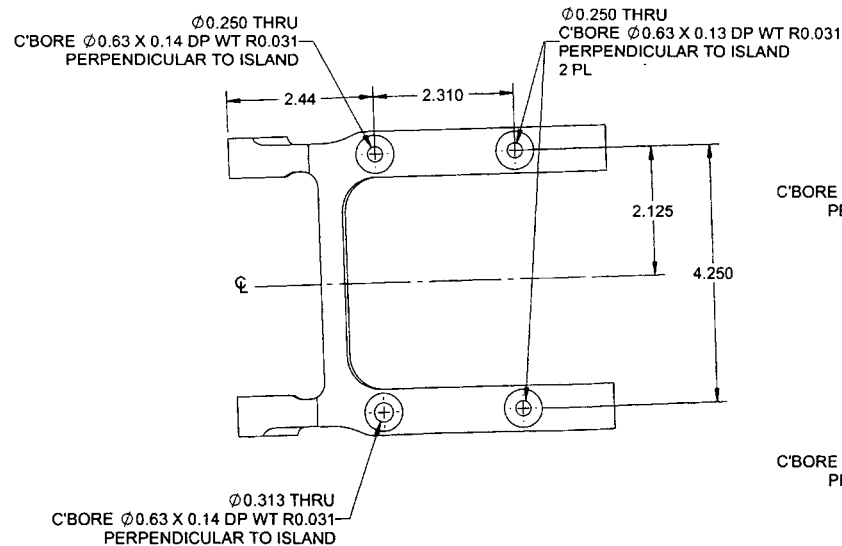
SECTION A-A C5-2



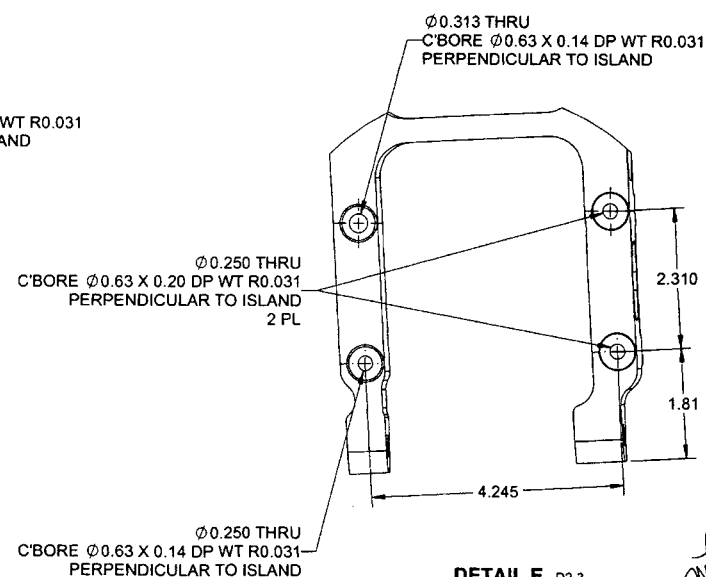
DETAIL B C7-2



SECTION C-C B2-3



SECTION D-D C5-3



DETAIL E D2-3

RELEASED
2013-11-29

DESIGN	RF	EAGLE COPTERS LTD. CALGARY, ALBERTA, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. A
MFG. APPR.	RF	E4702	SHEET 3 OF 3
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	LADDER	NTS
DATE	12.08.27	COPYRIGHT © 2012 BY EAGLE COPTERS LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.	



Packing Slip 3833

600 O'CONNOR DRIVE, KINGSTON, ONTARIO K7P 1N3
 TEL: 613-384-1662 FAX: 613-384-2997
 www.wejay.com

SOLD TO Dart Aerospace
 1270 Aberdeen Street
 Hawkesbury ON K6A 1K7

SHIP TO Dart Aerospace
 1270 Aberdeen Street
 Hawkesbury ON K6A 1K7

INVOICE DATE		YOUR ORDER NO. PO22776		DATE ORDERED 01/29/14		SHIPPED VIA Best way	
CUSTOMER CODE DART		PROV. LIC. NO.		Extra <input type="checkbox"/> Exempt <input type="checkbox"/>		TERMS	
QUANTITY ORDERED	B.O.	QUANTITY SHIPPED	DESCRIPTION			UNIT PRICE	AMOUNT
5	0	5	Fabricate ladder as per drawing E4702, Rev. A Ref: E4702-1P B111857				
5	1	4	Fabricate support bracket as per drawing E4706, Rev. A Ref: E4706-1P B111856				
<p>Required by: March 24, 2014</p> <p>RELEASE NOTE</p> <p>I certify that the items listed hereon have been inspected and tested and conform to all specifications and requirements in the contract or purchase order.</p> <p>Inspection Supervisor <u><i>[Signature]</i></u> WMP 03</p> <p><i>8814-3-27</i></p> <p><i>MAR 26/14</i></p>							

ORDER: COMPLETE ☐
 PARTIAL ☐

TOTAL

NO GOODS RETURNED WITHOUT
 PRIOR AUTHORIZATION

RECEIVED BY _____
 1.5% PER MONTH (18% PER ANNUM)
 CHARGED ON OVERDUE ACCOUNTS



600 O'CONNOR DRIVE, KINGSTON, ONTARIO K7P 1N3

PHONE: (613) 384-1662


FAX: (613) 384-2997

CERTIFICATE OF COMPLIANCE

CUSTOMER: Dart Aerospace	DATE: Mar. 26, 2014		
	P.O.# PO22776		
	WEJAY JOB# 36656		
I hereby certify that the following material has been inspected/tested and conforms to the requirements and specifications as stated in your contract and as noted below. Any exceptions will be listed as NCR items.			
PART NO.	QTY.	PROCESS (ES)	SPECIFICATION / REV
E4702-1 'Ladder'	5	Machined complete per drawing req'ts.	E4702 / rev. A
Note: 1) Material Test Report attached -ref. 'Kaiser Aluminum' Lot# 666229AO (Wejay TN# 030025-1). 2) 1st Article Dimensional Inspection report attached.			

Records of Inspection/Test will be retained for 5 years minimum.

Yours truly,


Clifford Smith
Authorized Q.A. Signatory



0098219

2pgs

**KAISER
ALUMINUM**Trentwood Works • Spokane, WA 99215
Phone: (800) 367-2586**CERTIFIED TEST REPORT**Serial Number
4321147

SHIP TO:
SOLD TO:

CUSTOMER PO NUMBER: 052563	WORK PACKAGE:	CUSTOMER PART NUMBER:	SHIP RUN/LOAD: 102820/20	GOVT CONTRACT NUMBER:
KAISER ORDER NO: 1161240	LINE ITEM: 3	SHIP DATE: 13-JAN-2014	ALLOY: 7075	CLAD: BARE
TEMPER: T7351	PRODUCT DESCRIPTION: Kaiser Select® Plate	WEIGHT SHIPPED: 12784 LB	QUANTITY: 6 PCS EST.	TRUCK R/L R: 2045801
GAUGE: 2.0000 IN (50.800 MM)	DIAMETER/WIDTH: 84.500 IN (2155.3 MM)	LENGTH: 181.250 IN (4595.3 MM)		

MHU 1747821: LOT 868259A7: 2 pieces;
 MHU 1747822: LOT 868259A7: 1 piece;
 MHU 1748031: LOT 868229A0: 2 pieces;
 MHU 1748032: LOT 868229A0: 1 piece;

Certified Specifications

AMS 4078/RevJ
 ASTM B 209/Rev10
 BSS 7055/RevB
 GAMP5 8101/RevB
 PS 21211/RevM

AMS 6061-260/12
 ASTM B 594/Rev13
 C8T1 006/RevE
 GSS18100/RevG/Amcl

AMS-STD-2154/RevA
 SAC 6438/RevJ
 DPS 4.713/RevAK
 MMS 169/RevT

Test Code: 4297

Test Results

LOT: 868229A0

Cast 581

Drop 43

Ingot 2

Melted In USA

(ASTM E8/B357)
(EN 3002-1)

Tensile: T7351

Dir / # Tests
LT / R (Min:Max)Ultimate KSI (MPa)
73.0 : 75.4
(503 : 520)Yield KSI (MPa)
62.1 : 85.3
(428 : 480)Elongation %
12.4 : 12.7(ASTM E1004)
(EN 2004-1)Conductivity %IACS :
IMS/M :41.3 Min
24.0 Min41.5 Max
24.1 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual(wt%)	0.00	0.14	1.0	0.01	2.4	0.20	5.8	0.02	0.01	0.00	10T 0.05

Page 1 of 2



TN030025-1
 Job # 36656
 rec'd Feb. 21/14

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4321147

Lot: 868259A7 Cast 881 Drop 60 Ingot 2 Melted in USA

(ASTM B209)
(EN 2002-1)

Tanals:	Temper	Dir / # Tests	Ultimate KSI (MPa)	Yield KSI (MPa)	Elongation %
	T7351	LT / 2 (Min/Max)	71.9 / 73.2 (498 : 509)	61.3 : 62.8 (423 : 434)	11.7 : 11.7

(ASTM E1004)
(EN 2004-1)

Conductivity %IACS	40.8 Min	41.1 Max
(MS/M)	29.7 Min	29.8 Max

(ASTM E1281)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual (wt%)	0.07	0.18	1.4	0.02	2.4	0.18	5.0	0.03	0.01	0.01	TOT 0.05

ALLOY LIMITS

	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075												
MIN (wt%)	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX (wt%)	0.40	0.50	2.0	0.30	2.9	0.28	5.1	0.20	0.05	0.05	TOT	0.15

Aluminum Remaninder

TEST NOTES

Metal represented by this test report was 100% immersion ultrasonically tested from one side with 3mm bead waves top and bottom and meets the Class A and Class B requirements of all specifications referenced in this test report. No surface marking of sonic indications is performed.

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC (Kaiser), is ISO 9001:2008 certified and hereby certifies that all material shipped under this order has been inspected, tested, and found to be in accordance with the requirements of the specifications indicated herein. For material purchases outside specification limits, mechanical properties are as shown herein and chemical composition meets and exceeds requirements. This material is the property of Kaiser Aluminum and is to be used only for the purpose for which it was purchased. It is to be used in the United States of America or a qualifying country per DFARS 225.372-11(a), was manufactured in the United States of America, and meets the requirements of DFARS 225.372-11(a) for domestic content.

It has been determined, reviewed, and is in compliance with MIL-STD-1772, where applicable.

It is mercury free, within the limits of detection of ASTM B1251 (2.0 g/g).

It is in compliance with RoHS 2, European Union Directive 2011/65/EU.

It is in compliance with and hereby certifies any updates to the European Chemical Agency, REACH regulation, EC No 1907/2006, as amended.

Any warranty is limited to that shown on Kaiser Aluminum's standard general terms and conditions of sale. Test reports are on file without reservation. Test reports shall not be reprinted except in full, without the written approval of the Kaiser Aluminum Laboratory. The reprinting or sale, without the written approval of Kaiser Aluminum, of copies of this certificate may be punished as a felony under federal law.

James Hemenway

JAMES HEMENWAY, LABORATORIES SUPERVISOR

Page 2 of 2



Customer Dart Aerospace Customer P.O. PO22776

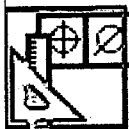
Drawing # E4702 Drawing rev A

Part Number E4702-041 E.C.O. -

Part Name Ladder Material Aluminum Alloy 7075-T7351 per AMS QQ-A-250/12

Serial # 002 Inspected by Cliff Smith

Job # 36656 Signature:



Overall Result

All Characteristics: 200
 Out of tolerance: 4
 Over Warning Limit: 0
 Not Calculated: 0

Comment: Material: 7075-T7351 per AMS QQ-A-250/12
 ref. 'Kaiser Aluminum' Lot# 666229AO
 (Wejay TN# 030025-1)

Feature	ID	Actual	Nominal	Pos Tol.	Neg Tol.	Deviation	<- ->
<input type="checkbox"/> 5.00 width o.a. 2_C3	CartDist	5.0024	5.0000	0.0300	-0.0300	0.0024	-
<input type="checkbox"/> 25.25 dim 1 2_C6	X	25.2476	25.2500	0.0300	-0.0300	-0.0024	-
<input type="checkbox"/> 25.25 dim 2 2_C6	X	25.2482	25.2500	0.0300	-0.0300	-0.0018	-
<input type="checkbox"/> 2.453 dim 2_B8	Y	-2.4525	-2.4525	0.0100	-0.0100	0.0000	-
<input type="checkbox"/> 2.453 dim 2 2_B4	Y	-2.4537	-2.4525	0.0100	-0.0100	-0.0013	-
<input type="checkbox"/> 4.905 dim 2_B8	CartDist	4.9042	4.9050	0.0100	-0.0100	-0.0008	-
<input type="checkbox"/> 4.645 dim 2_B3	CartDist	4.6373	4.6450	0.0100	-0.0100	-0.0077	-
<input type="checkbox"/> .655 dim 1 of 2 2_B7	CartDist	0.6539	0.6550	0.0000	-0.0050	-0.0011	-
<input type="checkbox"/> .655 dim 2 of 2 2_B7	CartDist	0.6533	0.6550	0.0000	-0.0050	-0.0017	-
<input type="checkbox"/> .655 dim 3 2_B3	CartDist	0.6531	0.6550	0.0000	-0.0050	-0.0019	-
<input type="checkbox"/> .655 dim 4 2_B3	CartDist	0.8133	0.8150	0.0000	-0.0050	-0.0017	-
<input type="checkbox"/> .45 dim 1 of 2 2_B7_Y	Dist	0.4433	0.4500	0.0300	-0.0300	-0.0067	-
<input type="checkbox"/> .45 dim 2 of 2 2_B7_Y	Dist	0.4433	0.4500	0.0300	-0.0300	-0.0067	-
<input type="checkbox"/> .46 dim 2_B4	ResEle	0.4603	0.4600	0.0300	-0.0300	0.0003	-
<input type="checkbox"/> .51 dim 2_B4	ResEle	0.5069	0.5100	0.0300	-0.0300	-0.0031	-
<input type="checkbox"/> 1.49 dim 2_D7	X	1.4946	1.4900	0.0300	-0.0300	0.0046	-
<input type="checkbox"/> 5.27 dim 2_D7	CartDist	5.2644	5.2700	0.0300	-0.0300	-0.0056	-
<input type="checkbox"/> 2.35 dim 2_D6	CartDist	2.3508	2.3500	0.0300	-0.0300	0.0008	-
<input type="checkbox"/> 9.13 dim 2_D5	CartDist	9.1244	9.1300	0.0300	-0.0300	-0.0056	-
<input type="checkbox"/> 3.50 dim 1 3_D8	CartDist	3.5068	3.5000	0.0300	-0.0300	0.0068	-
<input type="checkbox"/> 3.50 dim 2 3_D8	CartDist	3.4987	3.5000	0.0300	-0.0300	-0.0013	-
<input type="checkbox"/> 3.50 dim 3 3_D8	CartDist	3.4987	3.5000	0.0300	-0.0300	-0.0013	-
<input type="checkbox"/> 3.50 dim 4 3_D8	CartDist	3.5017	3.5000	0.0300	-0.0300	0.0017	-
<input type="checkbox"/> .40 sect 1 2_D7	CartDist	0.3961	0.4000	0.0300	-0.0300	-0.0039	-
<input type="checkbox"/> .40 sect 2 2_D7	CartDist	0.4006	0.4000	0.0300	-0.0300	0.0006	-
<input type="checkbox"/> .40 sect 3 2_D7	CartDist	0.4006	0.4000	0.0300	-0.0300	0.0006	-
<input type="checkbox"/> .40 sect 4 2_D7	CartDist	0.4021	0.4000	0.0300	-0.0300	0.0021	-
<input type="checkbox"/> R 0.56 typ 2_D5	R	0.5620	0.5600	0.0300	-0.0300	0.0020	-
<input type="checkbox"/> 0.250 holes 2_D6(1)	D	0.2502	0.2500	0.0050	-0.0010	0.0002	-
<input type="checkbox"/> 0.250 holes 2_D6(2)	D	0.2502	0.2500	0.0050	-0.0010	0.0002	-
<input type="checkbox"/> 0.250 holes 2_D6(3)	D	0.2501	0.2500	0.0050	-0.0010	0.0001	-
<input type="checkbox"/> 0.250 holes 2_D6(4)	D	0.2501	0.2500	0.0050	-0.0010	0.0001	-

Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<- ->
<input type="checkbox"/> Pos_.250 hole 1 2_D6^X	GDT PosRec X	0.0038 7.3881	0.0000 7.3900	0.0600		0.0038 -0.0019	-
<input type="checkbox"/> Pos_.250 hole 1 2_D6^Y	GDT PosRec Y	0.0084 2.1208	0.0000 2.1250	0.0200		0.0084 -0.0042	-
<input type="checkbox"/> Pos_.250 hole 2 2_D6^X	GDT PosRec X	0.0002 2.7501	0.0000 2.7500	0.0200		0.0002 0.0001	-
<input type="checkbox"/> Pos_.250 hole 2 2_D6^Y	GDT PosRec Y	0.0109 2.1195	0.0000 2.1250	0.0200		0.0109 -0.0055	-
<input type="checkbox"/> Pos_.250 hole 3 2_D6^X	GDT PosRec X	0.0029 -0.0014	0.0000 0.0000	0.0200		0.0029 -0.0014	-
<input type="checkbox"/> Pos_.250 hole 3 2_D6^Y	GDT PosRec Y	0.0028 -4.2514	0.0000 -4.2500	0.0200		0.0028 -0.0014	-
<input type="checkbox"/> Pos_.250 hole 4 2_D6^X	GDT PosRec X	0.0028 2.7486	0.0000 2.7500	0.0200		0.0028 -0.0014	-
<input type="checkbox"/> Pos_.250 hole 4 2_D6^Y	GDT PosRec Y	0.0043 -4.2522	0.0000 -4.2500	0.0200		0.0043 -0.0022	-
<input type="checkbox"/> .3745 dia 1 1_A8	D	0.3752	0.3745	0.0005	0.0000	0.0007	0.0002
<input type="checkbox"/> 6.950 dim 1 2_C7	X	-6.9509	-6.9500	0.0100	-0.0100	-0.0009	-
<input type="checkbox"/> .986 dim 1 2_C7	Z	-0.9834	-0.9860	0.0100	-0.0100	0.0026	-
<input type="checkbox"/> .3745 dia 2 1_A8	D	0.3752	0.3745	0.0005	0.0000	0.0007	0.0002
<input type="checkbox"/> 6.950 dim 2 2_C7	X	-6.9494	-6.9500	0.0100	-0.0100	0.0006	-
<input type="checkbox"/> .986 dim 2 2_C7	Z	-0.9842	-0.9860	0.0100	-0.0100	0.0018	-
<input type="checkbox"/> .3745 dia 3 1_A8	D	0.3752	0.3745	0.0005	0.0000	0.0007	0.0002
<input type="checkbox"/> 24.375 dim 1 2_B6	X	24.3762	24.3750	0.0100	-0.0100	0.0012	-
<input type="checkbox"/> .720 dim 1 2_C4	Z	-0.7208	-0.7200	0.0100	-0.0100	-0.0008	-
<input type="checkbox"/> .3745 dia 4 1_A8	D	0.3752	0.3745	0.0005	0.0000	0.0007	0.0002
<input type="checkbox"/> 24.375 dim 2 2_B6	X	24.3771	24.3750	0.0100	-0.0100	0.0021	-
<input type="checkbox"/> .720 dim 2 2_C4	Z	-0.7205	-0.7200	0.0100	-0.0100	-0.0005	-
<input type="checkbox"/> .44 dim 1 2_B7	X	0.4507	0.4400	0.0300	-0.0300	0.0107	-
<input type="checkbox"/> .44 dim 2 2_B7	X	0.4521	0.4400	0.0300	-0.0300	0.0121	-
<input type="checkbox"/> .986 dim 1 2_C7	Z	-1.0062	-0.9860	0.0300	-0.0300	-0.0202	-
<input type="checkbox"/> .986 dim 2 2_C7	Z	-1.0068	-0.9860	0.0300	-0.0300	-0.0208	-
<input type="checkbox"/> 1.35 dim 1_C7	X	1.3476	1.3500	0.0300	-0.0300	-0.0024	-
<input type="checkbox"/> 1.82 dim 2_C4	X	-1.8199	-1.8200	0.0300	-0.0300	0.0001	-
<input type="checkbox"/> 24.38 dim 1 1_B7_X	Dist	24.3603	24.3800	0.0300	-0.0300	-0.0197	-
<input type="checkbox"/> 24.38 dim 2 1_B7_X	Dist	24.3602	24.3800	0.0300	-0.0300	-0.0198	-
<input type="checkbox"/> 2.60 dim sd 1 2_C7	X	2.5860	2.6000	0.0300	-0.0300	-0.0140	-
<input type="checkbox"/> .230 dim 1 sd 1 3_D7	Z	-0.2295	-0.2300	0.0100	-0.0100	0.0005	-
<input type="checkbox"/> 1.10 dim 1 sd1 2_C7_X	Dist	1.0997	1.1000	0.0300	-0.0300	-0.0003	-
<input type="checkbox"/> 1.07 dim 1 sd1 3_D7_Z	Dist	1.0700	1.0700	0.0300	-0.0300	0.0000	-
<input type="checkbox"/> .30 depth 1 sd1 3_D7	Y	0.3051	0.3000	0.0300	-0.0300	0.0051	-
<input type="checkbox"/> .230 dim 2 sd 1 3_D7	Z	-0.2293	-0.2300	0.0100	-0.0100	0.0007	-
<input type="checkbox"/> 1.50 dim sd1 2_C6_X	Dist	1.5000	1.5000	0.0300	-0.0300	0.0000	
<input type="checkbox"/> 1.07 dim 2 sd1 3_D7_Z	Dist	1.0701	1.0700	0.0300	-0.0300	0.0001	-
<input type="checkbox"/> .30 depth 2 sd1 3_D7	Y	0.3037	0.3000	0.0300	-0.0300	0.0037	-
<input type="checkbox"/> .230 dim 3 sd 1 3_D7	Z	-0.2296	-0.2300	0.0100	-0.0100	0.0004	-
<input type="checkbox"/> 1.55 dim sd1 2_C6_X	Dist	1.5498	1.5500	0.0300	-0.0300	-0.0002	-

Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<- ->
<input type="checkbox"/> 1.07 dim 3 sd1 3_D7_Z	Dist	1.0701	1.0700	0.0300	-0.0300	0.0001	-
<input type="checkbox"/> .30 depth 3 sd1 3_D7	Y	0.3027	0.3000	0.0300	-0.0300	0.0027	-
<input type="checkbox"/> .230 dim 4 sd 1 3_D7	Z	-0.2299	-0.2300	0.0100	-0.0100	0.0001	-
<input type="checkbox"/> 9.75 dim sd1 2_C5_X	Dist	9.7502	9.7500	0.0300	-0.0300	0.0002	-
<input type="checkbox"/> 1.07 dim 4 sd1 3_D7_Z	Dist	1.0694	1.0700	0.0300	-0.0300	-0.0006	-
<input type="checkbox"/> .30 depth 4 sd1 3_D7	Y	0.3018	0.3000	0.0300	-0.0300	0.0018	-
<input type="checkbox"/> 1.20 dim sd 1 2_C4_X	Dist	1.2000	1.2000	0.0300	-0.0300	0.0000	-
<input type="checkbox"/> .230 dim 5 sd 1 3_D7	Z	-0.2302	-0.2300	0.0100	-0.0100	-0.0002	-
<input type="checkbox"/> 1.10 dim 2 sd1 2_C4_X	Dist	1.0999	1.1000	0.0300	-0.0300	-0.0001	-
<input type="checkbox"/> 1.07 dim 5 sd1 3_D7_Z	Dist	1.0703	1.0700	0.0300	-0.0300	0.0003	-
<input type="checkbox"/> .30 depth 5 sd1 3_D7	Y	0.3026	0.3000	0.0300	-0.0300	0.0026	-
<input type="checkbox"/> 2.60 dim sd 2 2_C7	X	2.5874	2.6000	0.0300	-0.0300	-0.0126	-
<input type="checkbox"/> .230 dim 1 sd 2 3_D7	Z	-0.2303	-0.2300	0.0100	-0.0100	-0.0003	-
<input type="checkbox"/> 1.10 dim 1 sd2 2_C7_X	Dist	1.0999	1.1000	0.0300	-0.0300	-0.0001	-
<input type="checkbox"/> 1.07 dim 1 sd2 3_D7_Z	Dist	1.0700	1.0700	0.0300	-0.0300	0.0000	-
<input type="checkbox"/> .30 depth 1 sd2 3_D7	Y	-0.3041	-0.3000	0.0300	-0.0300	-0.0041	-
<input type="checkbox"/> .230 dim 2 sd 2 3_D7	Z	-0.2300	-0.2300	0.0100	-0.0100	0.0000	
<input type="checkbox"/> 1.50 dim sd2 2_C6_X	Dist	1.5001	1.5000	0.0300	-0.0300	0.0001	-
<input type="checkbox"/> 1.07 dim 2 sd2 3_D7_Z	Dist	1.0699	1.0700	0.0300	-0.0300	-0.0001	-
<input type="checkbox"/> .30 depth 2 sd2 3_D7	Y	-0.3043	-0.3000	0.0300	-0.0300	-0.0043	-
<input type="checkbox"/> .230 dim 3 sd 2 3_D7	Z	-0.2301	-0.2300	0.0100	-0.0100	-0.0001	-
<input type="checkbox"/> 1.55 dim sd2 2_C6_X	Dist	1.5498	1.5500	0.0300	-0.0300	-0.0002	-
<input type="checkbox"/> 1.07 dim 3 sd2 3_D7_Z	Dist	1.0700	1.0700	0.0300	-0.0300	0.0000	-
<input type="checkbox"/> .30 depth 3 sd2 3_D7	Y	-0.3051	-0.3000	0.0300	-0.0300	-0.0051	-
<input type="checkbox"/> .230 dim 4 sd 2 3_D7	Z	-0.2301	-0.2300	0.0100	-0.0100	-0.0001	-
<input type="checkbox"/> 9.75 dim sd2 2_C5_X	Dist	9.7499	9.7500	0.0300	-0.0300	-0.0001	-
<input type="checkbox"/> 1.07 dim 4 sd2 3_D7_Z	Dist	1.0692	1.0700	0.0300	-0.0300	-0.0008	-
<input type="checkbox"/> .30 depth 4 sd2 3_D7	Y	-0.3062	-0.3000	0.0300	-0.0300	-0.0062	-
<input type="checkbox"/> 1.20 dim sd 2 2_C4_X	Dist	1.2000	1.2000	0.0300	-0.0300	0.0000	-
<input type="checkbox"/> .230 dim 5 sd 2 3_D7	Z	-0.2299	-0.2300	0.0100	-0.0100	0.0001	-
<input type="checkbox"/> 1.10 dim 2 sd2 2_C4_X	Dist	1.0997	1.1000	0.0300	-0.0300	-0.0003	-
<input type="checkbox"/> 1.07 dim 5 sd2 3_D7_Z	Dist	1.0711	1.0700	0.0300	-0.0300	0.0011	-
<input type="checkbox"/> .30 depth 5 sd2 3_D7	Y	-0.3096	-0.3000	0.0300	-0.0300	-0.0096	-
<input type="checkbox"/> .204 holes 2_A5(1)	D	0.2043	0.2040	0.0050	-0.0010	0.0003	-
<input type="checkbox"/> .204 holes 2_A5(2)	D	0.2041	0.2040	0.0050	-0.0010	0.0001	-
<input type="checkbox"/> .204 holes 2_A5(3)	D	0.2038	0.2040	0.0050	-0.0010	-0.0002	-
<input type="checkbox"/> Pos_.204 hole 1 2_B6^X	GDT PosRec X	0.0007 7.1504	0.0000 7.1500	0.0600		0.0007 0.0004	-
<input type="checkbox"/> Pos_.204 hole 1 2_B6^Y	GDT PosRec Y	0.0176 1.1712	0.0000 1.1800	0.0200		0.0176 -0.0088	—
<input type="checkbox"/> Pos_.204 hole 2 2_B5^X	GDT PosRec X	0.0003 1.7501	0.0000 1.7500	0.0200		0.0003 0.0001	-
<input type="checkbox"/> Pos_.204 hole 2 2_B5^Y	GDT PosRec Y	0.0169 1.1715	0.0000 1.1800	0.0200		0.0169 -0.0085	—
<input type="checkbox"/> Pos_.204 hole 3 2_B5^X	GDT PosRec X	0.0045 -0.0023	0.0000 0.0000	0.0200		0.0045 -0.0023	-

Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<- ->
■ .250 hole 1e 3_A3	D	0.2501	0.2500	0.0050	-0.0010	0.0001	—
■ 1.81 dim 1e 3_B1	X	-1.8110	-1.8125	0.0100	-0.0100	0.0015	—
■ 2.125 dim 1e 3_B2	Y	2.1249	2.1250	0.0100	-0.0100	-0.0001	—
■ .250 hole 1e Perp to islands	GDT Perp	0.0034	0.0000	0.0100		0.0034	—
■ .313 hole 1e 3_C2	D	0.3126	0.3125	0.0060	-0.0010	0.0001	—
■ 2.310 dim 1e 3_B1	X	-2.3100	-2.3100	0.0100	-0.0100	0.0000	—
■ 2.125 dim 2e 2_B2	Y	2.1236	2.1250	0.0100	-0.0100	-0.0014	—
■ .313 hole 1e Perp to islands	GDT Perp	0.0037	0.0000	0.0100		0.0037	—
■ .250 hole 2e 3_B3	D	0.2502	0.2500	0.0050	-0.0010	0.0002	—
■ 1.81 dim 2e 3_B1	X	-1.8102	-1.8100	0.0300	-0.0300	-0.0002	—
■ 4.245 dim 1e 3_B2_3d	Dist	4.2514	4.2450	0.0100	-0.0100	0.0064	—
■ .250 hole 2e Perp to islands	GDT Perp	0.0011	0.0000	0.0100		0.0011	—
■ .250 hole 3e 3_B3	D	0.2502	0.2500	0.0050	-0.0010	0.0002	—
■ 2.310 dim 2e 3_B1	X	-2.3087	-2.3100	0.0100	-0.0100	0.0013	—
■ 4.245 dim 2e 3_B2_3d	Dist	4.2542	4.2478	0.0100	-0.0100	0.0064	—
■ .250 hole 3e Perp to islands	GDT Perp	0.0010	0.0000	0.0100		0.0010	—
■ .63 dia c'bore 1e 3_A3	D	0.6238	0.6300	0.0300	-0.0300	-0.0062	—
■ .14 depth 1e 3_A3	Z	-0.1298	-0.1400	0.0300	-0.0300	0.0102	—
■ .63 dia c'bore 2e 3_C2	D	0.6234	0.6300	0.0300	-0.0300	-0.0066	—
■ .14 depth 2e 3_C2	Z	-0.1293	-0.1400	0.0300	-0.0300	0.0107	—
■ .63 c'bore 3e 3_B3	D	0.6238	0.6300	0.0300	-0.0300	-0.0062	—
■ .20 depth 1e 3_B3	Z	-0.1922	-0.2000	0.0300	-0.0300	0.0078	—
■ .63 c'bore 4e 3_B3	D	0.6239	0.6300	0.0300	-0.0300	-0.0061	—
■ .20 depth 2e 3_B3	Z	-0.1923	-0.2000	0.0300	-0.0300	0.0077	—



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO22776**

Purchase Order Date 1/24/2014

PO Print Date 1/28/2014

Page Number 1 of 1

Order From :

VC-WMP001

Ship To : DART AEROSPACE LTD

WEJAY MACHINE PRODUCTS CO. LTD
600 O'CONNOR DRIVE
KINGSTON, ONTARIO K7P 1N3
CANADA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAKIE
6/14/08

Contact Name

Vendor Phone

613-384-1662

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Ship To Contact

Ship To Phone

Ship Via:

FedEx PI collect

Ship Acct:

Terms

COD

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extens Pr
1	E4702-1P	Ladder	3/28/2014 Yes 3/24/2014		5.00 Each	\$1,910.00	\$9,550

MACHINE AS PER DWG E4702 REV. A
B111857

QUOTATION NO. WJ-7672

Line Total: \$9,550

2	E4706-1P	Support Bracket	3/24/2014 Yes 3/24/2014		5.00 Each	\$2,330.00	\$11,650
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MACHINE AS PER DWG E4706 REV. A
B111856

QUOTATION NO. WJ-7672

Line Total: \$11,650

PO Total: \$21,200

PO Instructions:

Procurement Quality Clauses

A004-FAA-PMA/TSO

A005-Right of Entry

A008-First Article Inspection (FAI) by seller, (Documentation sent to Dart Aerospace)

A011-Delegations-Supplier Verification of Dart Aerospace Product

A012-Chemical and Physical Reports

A016-Personnel Qualification

A026-Certificate of Material Conformance

A041-Quality Management System

CL
M. Eugene

Eric Downing

From: Linda Lacelle
Sent: Monday, April 07, 2014 7:17 AM
To: Patrick Smith; Eric Downing
Cc: Nigel Forbes; Mike Petsche
Subject: RE: E4702-041 machining marks

Importance: High

Thx Pat..

Eric, can we pls get these buffed out TODAY, I will schedule for NDT to come in tomorrow...we need to ship these kits asap, as the promised date has now been moved three times.

LL

From: Patrick Smith
Sent: April-05-14 12:43 AM
To: Linda Lacelle
Subject: Fw: E4702-041 machining marks

Good news.

Sent from my BlackBerry 10 smartphone on the Bell network.

From: David Shepherd <dshepherd@dartaero.com>
Sent: Friday, April 4, 2014 7:00 PM
To: Eric Downing; Mike Petsche; Chris Provencal
Cc: Patrick Smith; Sylvain Boyer; Jean-Luc Menard; Harvey Siemens
Subject: RE: E4702-041 machining marks

Eric,

Sorry for the slow response.

I discussed with Harvey today and he filled me in on the problems with the Solidworks model for this part. I don't have any objection to buffing out the defects in these parts to eliminate the potential stress risers.

JL,

Harvey says that the Solidworks model is in the process of being fixed for this.

Regards,
David

From: Eric Downing
Sent: April-02-14 2:04 PM
To: Mike Petsche; David Shepherd; Chris Provencal
Cc: Patrick Smith; Sylvain Boyer; Jean-Luc Menard
Subject: RE: E4702-041 machining marks

Hey guys can we get a resolution on these please so that I can get the parts over to LPI.

Thanks

Downing

From: Eric Downing
Sent: Friday, March 28, 2014 8:55 AM
To: 'Mike Petsche'; David Shepherd; 'Provencal, Chris'
Cc: psmith@dartaero.com; Sylvain Boyer; Jean-Luc Menard
Subject: E4702-041 machining marks
Importance: High

Sorry all the scanned drawing didn't attach to the drawing. Here it is showing the location of the machining marks.

My apologizes

Eric Downing

From: Eric Downing
Sent: Friday, March 28, 2014 8:49 AM
To: 'Mike Petsche'; David Shepherd; 'Provencal, Chris'
Cc: psmith@dartaero.com; Sylvain Boyer; Jean-Luc Menard
Subject: E4702-041 machining marks
Importance: High

Good morning David / Mike / Chris

Hate to bother the both any of you but at the incoming inspection on E4702-041 B11857 Ladder assembly that there are some raised machining marks on the part.

The marks are at the end of section D-D (you can also see in the attached drawing). They are not groves machined in to the parts just a raised edge. They are not sharp but it causes the part to not have a complete machined face. The marks are on all the parts (qty x 5) and are on both sides so it's definitely from the tool paths.

Since this is a flight critical part I would like your decision David before I send the parts to LPI inspection.

Thanks

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skyservice Work Order Traveler

Sky Service F.B.O. Inc.

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DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO20484	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: 23701
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN: 0	CSN: 0	TSO: 0	
Task: UNSCHEDULED			Sequence: 1

Work Required:

CARRY OUT NDT INSPECTION (LIQUID PENETRANT) ON 23 MISC PARTS

ITEM ID: E4702-041 LADDER ASSY
1 - WORK ORDER ID#: 111875 (QTY5)

ITEM ID: E4706-041 SUPPORT ASSY
2 - WORK ORDER ID#: 111856 (QTY5)

ITEM ID: D4806-3 STUD
3 - WORK ORDER ID#: 115957 (QTY4)

ID#: D4807-041 SUPPORT ASSY
4 - WORK ORDER ID#: 111664 (QTY3)

ID#: D4882-1 STRUT
5 - WORK ORDER ID#: 115543 (QTY4)

ID#: D4883-1 END FITTING
6 - WORK ORDER ID#: 113533 (QTY4)

Action Taken:	Date:	Initial/Stamp:				
LIQUID PENETRANT INSPECTION CARRIED OUT ON ITEMS LISTED ABOVE (ITEMS 1-6) AS PER ASTM1417M-13 NO CRACK FOUND Pen: ZL-56 BATCH# 09H094 EXP. DATE: AUG 2014, DEV: SKD-S2 EXP. DATE: OCT2017 CLEANER: SKC-S EXP. DATE: APR 2018	APR 08 2014	 				
Description	Location	P/N	Qty	Batch	S/N Off	S/N On

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	ACA/SCA Stamp	Date:
Name: ANTONINO MARCHETTA		APR 08 2014